Title (en)

CONTROL OF A PRESSURE EXCHANGER BY DISPLACEMENT OF AN INJECTION VALVE MEMBER

Title (de)

DRUCKÜBERSETZERSTEUERUNG DURCH BEWEGUNG EINES EINSPRITZVENTILGLIEDES

Title (fr)

COMMANDE D'UN MULTIPLICATEUR DE PRESSION PAR LE MOUVEMENT D'UN ELEMENT D'INJECTEUR

Publication

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Application

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Abstract (en)

[origin: WO2004003373A1] The invention relates to a device for injecting fuel into a combustion chamber (41) of an internal combustion engine, said device comprising an injection body (5, 6) which receives an injection valve member (34) that can be actuated by subjecting a control chamber to pressure or relieving said control chamber (21) of pressure by means of a control valve (25). Said device also comprises a pressure exchanger (3) provided with a piston unit (17) which separates a working chamber (14) and a control chamber (15) of the pressure exchanger (3), said piston unit acting on a compression chamber (18) which is connected (9, 20) to an injector chamber (36) surrounding the injection valve member (34). The control chamber (15) of the pressure exchanger (3) is either subjected to pressure (2, 11, 12) or relieved of pressure (19, 26.2, 64) according to the reciprocating motion of the injection valve member (34).

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